



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

a knowledge of the genesis of certain institutions if it seems likely that such knowledge will have bad consequences; but the question, what is the truth, is quite distinct from the question, should the truth be freely given to all. It may be practically best at a given period to prevent the knowledge of the genesis of religion, for example, (supposing that we possess it), from becoming popular; but this is by no means equivalent to admitting that religion has no antecedent cause. If, therefore, the teleologist here makes an objection to the mechanical theory, he must base it on the unwisdom of the mechanist in publishing his theory and not on that theory's form.

Such appear to be the chief factors in the mechanical explanation of the belief that teleological and mechanical theories of religious phenomena are absolutely opposed to each other. Contrary to this belief, our general conclusion must be that the two forms of explanation are complementary and in no sort of conflict. It is perhaps necessary to add that by "mechanical explanation" here is not meant "explanation by matter in motion exclusively" (*vide* first paragraph of article).

BERNARD MUSCIO.

UNIVERSITY OF SYDNEY, AUSTRALIA.

AN EMPIRICAL VIEW OF THE TRINITY.

There are many rationalistically-minded theists to-day who wonder how intelligent persons can continue to use the language of the old Trinitarian dogma. God to them is an unquestioned reality; although we never see or hear Him, and cannot clearly say where or how He exists, we can be sure that He does exist. But that He is One God in Three Persons seems to them utterly unintelligible and a remnant of scholastic metaphysics which modern common sense should repudiate. Surely, when Christianity is thoroughly rationalized, this incomprehensible and self-contradictory doctrine must yield to the clean-cut Unitarian conception.

In answer to this familiar contention, it would not be a paradox to say that the mystical Trinitarian formula, though, to be sure, it is clothed in the creeds with an unwarranted license of language, is based far more firmly upon experience than the more sharply defined theistic conception of the rationalists.

For how do we know, after all, that God exists? The old naive faith in the Biblical legends of a Jehovah who walked in the garden in the cool of the afternoon, who conversed with the saints, and wrote the Decalog with his finger upon tables of stone, is obsolescent. We can no longer believe in the existence of such a person just because the writers of the Bible-documents believed in him, any more than we can believe in Apollo or Artemis because the Greek epic poets believed in them. We cannot even believe in him because Jesus believed in him; a Jew of the first century, steeped in the pious hopes of his countrymen, how could he possibly help believing? His genius was religious, not scientific; he was no analyst, as Phillips Brooks once said; the whole bent of his nature led him to adopt the faith of his fathers, deepening, sweetening, spiritualizing it, but certainly never questioning its essential truth.

Nor can we rely any longer upon the stock arguments of the older theology—arguments from design, first-cause, *et al.* Every one of these has been so riddled with objections, or had its fallacies so exposed, that it needs an unread or obtuse theologian to rely upon them. The younger generation leaves the dust to gather upon all this laborious argumentation, pro and con, and turns to religious experience as the sole source of its faith and hopes. The question that now engages attention is, How is God revealed in human experience? Psychology and biography take the place of metaphysics, introspection and observation of *a priori* reasoning. The conviction is growing that the conception of God does not rest upon inferences from the nature of the universe, and still less upon a supernatural revelation, but upon the concrete facts of the religious life. God-experiences (if we may use the phrase) are primary, God-theories are secondary. So that even if our theorizing remains dubious and confused, these experiences are indisputable and precious; even if we were to discard the term "God" entirely, the Reality which we seek to name thereby would remain, of profound importance in the religious life of man.

And now, from historical and psychological studies this conclusion emerges: our experience of God is of three types—there are three sorts of human experience which, together, give us our conception of God.

Historically, the concept of God came into existence in these three principal ways: it was the crystallization of the awe and reverence and fear and faith felt in the contemplation of nature, felt

in the thought of deceased heroes or chiefs believed to be still alive, felt in the response to that inward pressure that we call conscience. We have passed beyond the stage of disputing whether religion had its origin in animism or in the belief in ghosts; it sprang from both sources. And—what is less commonly recognized—it sprang from the inner struggles of those prehistoric ancestors of ours who, millenniums before St. Paul, found two natures battling within them, the one devilish, the other divine.

And what is true of its origin is true of our God-idea still. In its fulness it is formed by the convergence of three great streams of mental tendency—the recognition of the Divine in nature, in our spiritual heroes, and in ourselves. God about and beyond us, in the vastness of the cosmic life; God in whatever religious leader the believer follows, the spiritual power in that other human life upon which he leans for guidance and inspiration; God in his heart, the Holy Spirit in him, to which he must give his entire allegiance if he would find lasting satisfaction and peace,—man's conception of God is naturally Trinitarian. For the Christian, Christ is pre-eminent among spiritual heroes, epitomizing and typifying that Divinity in other men which is our greatest source of salvation; he is the supreme revealer of God to us, the symbol and concrete incarnation of Godliness in man. And so the Trinitarianism of Christianity, derived as it was by a devious and blind process of intuition and easily refutable dialectic, has not been, after all, a wide departure from man's spontaneous and instinctive reactions to the great and mysterious forces without him and within.

The belief in God is not, then, a mere act of credulity, a venture of faith in the unknown, an "over-belief," sufficient for our personal needs but unverifiable, unprovable to others. Such an adventurous belief might indeed be legitimate; but is it all we can have? No. The concept of God is, in its foundation-sense, empirical; it is not, at the outset, a matter of blindly believing, but of opening our eyes to see. It is one of Matthew Arnold's greatest services to thought that he insisted upon this truth. We may not deem his definition of God, as "the Power not ourselves that makes for righteousness," comprehensive enough; but we must applaud his attempt to point out in the conception of God, so largely being discarded as a mere superstition, a substratum of truth.

For there surely is in the world a great current pushing us into righteousness. In struggling to do right we are not setting

up merely arbitrary and conventional standards, we are moving in the direction which the forces of Nature have ordained. No matter how men may rebel and kick against the pricks, morality is bound eventually to win the day. In choosing virtue we choose the winning side; the cosmos is backing us. In this knowledge there is inspiration and assurance.

Moreover, the same cosmic process that has, from the beginning, been moving irresistibly in the direction of producing, in due time, human virtue and valor, has also flowered out into beauty and all other forms of good. Forces making for evil there also are, for ugliness and sorrow and sin; and men have widely differed in their reaction to that truth, some forming from it a devil-concept, some clinging to the faith that it contributes in the end to good, some ignoring it, throwing it overboard, as the mere waste-product of life. But to realize through every fiber of our being the presence of the Power for Good, the God-Power, as enduring and ultimately winning, to pledge our individual efforts on its side, and rejoice in its triumphs, is the essential *differentia* of the religious life.

The great seers and saints have realized more vividly than the average man the presence of this God in nature. From the Psalmists to Wordsworth, Carlyle, Emerson, we find men of vision inspired and consoled by the sight of this tide of Good that sweeps man on to a destiny which he but dimly sees. Much that was superstition and error has been mingled, no doubt, with this vision. This God whose glory the heavens declare was deemed a partisan Jewish deity, with a manlike form and speech, offering a crude extraneous reward and punishment to those who followed or disobeyed his will. But such anthropomorphism is better than an absence of vision. For rewards and punishments for virtue and vice there are, though they are intrinsic, and brought about in natural ways. And to lose the sense of the divineness of nature, to lose the faculty of worship, of reverence, of joy in the beauty and wonder of the world in which we live, is not only to be, in so far, irreligious, but therein to miss one of the essential ingredients in the noblest and happiest life.

But more than in nature do we find God in men—the best men we know; and for us at least of Christendom, in Christ. This need not imply any disloyalty to a truly historic conception of his life and teachings, need not imply anything miraculous or supernatural about him. The divineness in Christ may be as much a natural fact,

produced according to natural laws, as the divineness in the outer world may be. For our purpose here we need not debate that question. For certainly it was not the debated fact of supernaturalness (in the scientific sense) that made Christ divine; it was his character. His will was wholly merged with the will of God; there was no selfishness, no self-indulgence, in him. The Christ-life is the divine life for men, the measure of the amount of Godliness that we are capable of. To call his life divine is not in the least to assert that he was born of a virgin, raised the dead, rose himself from the tomb; it is a different sort of judgment, a value-judgment. The facts about his life must be decided by historical methods, as we would sift the records of the life of any other personage of the past; no ardent believer or entrenched ecclesiasticism ought to attempt to bias the impartial judgment of scholars upon them. But the question of the divineness of this life is to be decided by men of spiritual vision. And the verdict of truly religious men is all but unanimous; the great warrior, the great statesman, the great inventor, the great poet, have a veritable spark of God in them; but the life that is most truly divine, that most fully reaches up to God, is the life of purity and charity and self-sacrifice. Preeminent among such lives, dazzling men of all races for the two millenniums since he lived, is the life of the Carpenter of Nazareth.

But if divinity is especially incarnate in the spiritual heroes of mankind, it may also, in some measure live in each of us. We recognize amid the tangle and clutter of selfish and sensual desires a holier spirit within us. Sometimes an uprush of noble feeling or high resolve, a power for good, wells up in us, and we know it to be divine. This fountain of inner holiness springs up at times abruptly, even unexpectedly, and then oftenest subdues our other impulses into hushed obedience. But we need not consider these conversion-experiences as supernatural; the new spirit is holy, not because of its miraculous way of working, but because its influence in our lives is divine. The practically significant fact is that this power is ready for our use. As Emerson wrote, "It is a secret which every intelligent man quickly learns, that beyond the energy of his possessed and conscious intellect, he is capable of a new energy (as of an intellect doubled on itself) by abandonment to the nature of things; that besides his power as an individual man, there is a great public power upon which he can draw, by unlocking at all

risks his human doors, and suffering the ethereal tides to roll and circulate through him."

What all this may imply about the ultimate metaphysical nature of God is, no doubt, worth discussing, and conceivably of great import. But men are coming in these latter days to a humbler sense of their intellectual limitations; we are realizing that we know nothing of the inner nature of anything, save of our own conscious life as it passes. What is matter? What is electricity? What is God? Perhaps we cannot know. But what is practically important is to understand and utilize the experiences out of which these concepts have grown. If we can use electricity in our telephones and dynamos and trolley cars, we can be content to confess our ignorance of its inner nature. So if we can comprehend and repeat the religious experiences out of which the concept of God has arisen, it matters less if our knowledge of God is limited to that experience-contact.

Souls of different types and needs will naturally formulate their experience in different terms; there is no need that any one to whom the generalization is not personally useful should express his God-idea in a trinitarian formula. Trinitarianism should never be a dogma. And with the arguments and disputes of the Greek doctors of the third and fourth centuries, through whom that dogma took shape, we may have scant patience. Certainly all that sort of speculation is very alien to our modern scientific world-view. But on the other hand, the arguments of the rationalists of to-day for a God-idea divorced from those experiences in which it has its natural roots, are equally alien to the outlook and spirit of science. To believe in God is a mere act of credulity, except as we see the meaning of the God-idea in human life. When we do thus turn to experience, we find ourselves led to the God-conception from the three sorts of experience mentioned. So, as an embodiment of the profound truth of the threefold basis of our human conception of God, the Trinitarianism of the saints should command our sympathy and respect.

Trinitarianism, Unitarianism—as mutually exclusive dogmas, both are cramping and arrogant. What is important is to keep alive the experience that each term enshrines. The essential oneness of all God-experiences, and of the God-idea which they unite in producing, is important, no doubt. But the bare insistence upon unity has, now that the extravagances of polytheism are forever

past, little religious value, and tends to a contentment with less than the full gamut of religious experience. No one of the three forms of God-experience can be dispensed with in a rich and fruitful spiritual life; and it is no wonder that the orthodox have generally felt a merely negative Unitarianism to have an impoverishing tendency. However crude the creedal affirmations of Trinitarianism may be, the fulness of the Christian life has by it been fostered and preserved. So, however loath we may be to seem to accept the description of a quasi-human Being who is somehow Three Persons and yet One, if we take the doctrine (as we must take all religious doctrines) in its inner and spiritual sense, which is its empirical foundation-sense, we shall see it as a more or less blind expression of a great truth—that Christians can attain to the vision of God in three ways, through contemplation of the outer world, through faith in their Master Christ, and through obedience to the Holy Spirit in their hearts.

DURANT DRAKE.

VASSAR COLLEGE.

GENERAL NOTES ON THE CONSTRUCTION OF MAGIC SQUARES AND CUBES WITH PRIME NUMBERS.

The series of numbers generally used in the construction of magic squares are in arithmetical progression. The progression of the prime number series is very irregular, and therefore cannot be used as freely as an arithmetical series. This naturally leads to the investigation of the possible irregularities in groups or series of numbers which may be formed into magic squares. It is also necessary to find means of discovering these groups of numbers in the prime number series.

It is the writer's aim to describe here simple rules for constructing prime number squares, methods of finding the numbers to be used, and to point the way to the solution of a few of the problems not yet mastered.

THE SQUARE OF THE 3d ORDER.

There is only one possible construction of this square and there is only one rule governing the series, and that is, when the series is written in tabular form, as in Fig. 1, the differences between all